ECM group

December 27, 2005

Doug Dahme
Santa Rosa Fire Department
955 Sonoma Ave.
Santa Rosa, CA 95404

Re: Service Station Remodeling Project
4925 Sonoma Hwy.
Santa Rosa, CA

Dear Mr. Dahme:

This letter has been prepared regarding the ongoing service station remodeling project at the above referenced site. The following summarizes corrective action undertaken at this site as part of station remodeling:

1.) In November 2004 and January 2005, at the direction of the SRFD, approximately 6,000 cubic yards (CY) of soil were excavated from the northern portion of the site (Areas 1 and 2, as shown on the attached Figures).

2.) On December 14 and 15, 2005, an additional 700 CY was excavated.

3.) On December 16, 2005, piping was removed and samples were collected from beneath former dispensers and piping.

4.) Analytical results of samples collected during the December 2005 site activities were transmitted to your office on December 21, 2005.

Figures 1 and 2 (attached) show all detections for samples collected during December 2005 excavation activities. The figures also show all detections for samples collected along the southern sidewall of the November 2004 and January 2005 excavations. Analytical results are summarized as follows:

1.) Most of the samples show elevated concentrations of Motor Oil (MO) and/or Oil and Grease (O&G).

2.) A few samples show detectable concentrations for hydrocarbons as gasoline.

3.) Only 2 samples (out of 21) had detectable concentrations of BTEX constituents.

4.) Only one sample out of 21 (PS-5) had a significantly elevated concentration of gasoline. No BTEX constituents were detected in this sample, indicating that this is probably older, weathered gasoline from which the volatile constituents have been degraded by natural causes.

P.O. Box 802, Benicia, CA, 94510<< 707-751-0655>> 707-751-0653 (fax)

During our telephone conference on December 23, 2005, you indicated that on the basis of these results, SRFD would direct additional corrective action excavation at this site. On behalf of Redwood Oil Company (ROC) we request that this directive be reconsidered. There is no justification for additional excavation, for the following reasons:

1.) The primary constituents detected (MO and O&G) are heavy-end hydrocarbon compounds. They are largely immobile in soil and do not readily migrate in groundwater.

2.) These compounds do not volatilize.

3.) There are no cleanup standards or goals for these compounds.[1] Case closure is routinely granted across the state of California for leaking UST sites with comparable concentrations of these compounds in soil.

4.) Groundwater at this site fluctuates between approximately 20 ft and 30 ft below ground surface (bgs). All soil samples collected at 15 ft bgs were non-detect or near non-detect for all constituents.

5.) The results shown on Figures 1 and 2 are from approximately 3.5 ft to 5 ft bgs, sufficiently above the groundwater table to prevent the migration to groundwater of the heavy-end, immobile hydrocarbon constituents detected at the site.

6.) When the soil is left in place as recommended, it will be capped by concrete and/or asphalt. There will be no route of exposure for the public or for any receptor or potential receptor.

7.) These compounds do not volatilize, but in any case, volatilization of these heavy-end hydrocarbons through three to five feet of soil, and then through a concrete or asphalt cap, would be impossible.

8.) Dermal contact or ingestion through three to five feet of soil, and then through a concrete or asphalt cap, would also be impossible.

9.) Groundwater at this site has been monitored since 1992 as part of a leaking UST investigation. The North Coast Regional Board is the lead agency for the groundwater investigation. An air sparge (AS) system has been installed at the site for several years. Concentrations of all analytes in groundwater have been dropping for several years. At this time, concentrations of all analytes are very low or non-detect in all monitoring wells, and the site is a candidate for case closure. Heavy-end hydrocarbons have never been a concern of the groundwater investigation. For your reference, a copy of the most recent quarterly monitoring report for the site has been attached. Jo Bentz is the Board caseworker responsible for this site.

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[1] 2000, California Environmental Protection Agency, Regional Water Quality Control Board, Central Valley Region; A compilation of Water Quality Goals, August 2000

10.) Concentrations of lighter, more mobile hydrocarbons (gasoline and BTEX) are too low to warrant additional excavation. Excavation of soil for removal of very low concentrations of these compounds is not feasible, and is neither technically or economically justified.

The site data establishes that additional excavation at this site is neither necessary nor justified. The minor levels and minor amounts of impacted soil remaining at the site pose no threat to human health or safety or to the environment. We request that the SRFD reconsider its directive calling for additional excavation.

Thank you for your attention to this site. Please call if you have questions or require additional information.

Sincerely,
ECM Group

Jim Green
Professional Engineer #C58482

cc: Peter Van Alyea, Redwood Oil Company
Jo Bentz, North Coast Regional Water Quality Control Board

Attachments: Figures
November 15, 2005 Quarterly Monitoring Report

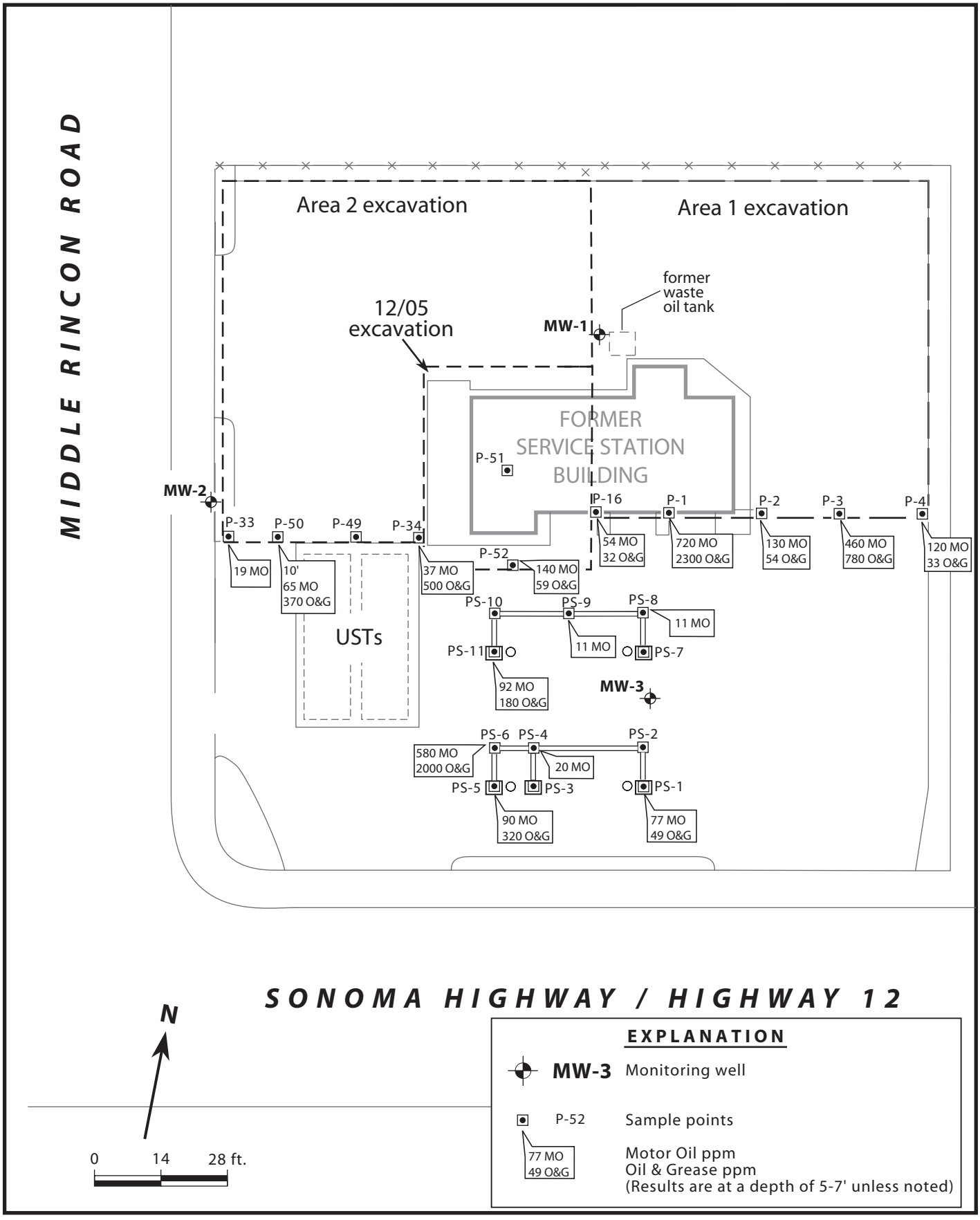

Figure 1. Site Plan and Excavation Limits - Redwood Oil Service Station #101, 4925 Sonoma Highway, Santa Rosa, California

98-517-22 [sample points] 12/16/05

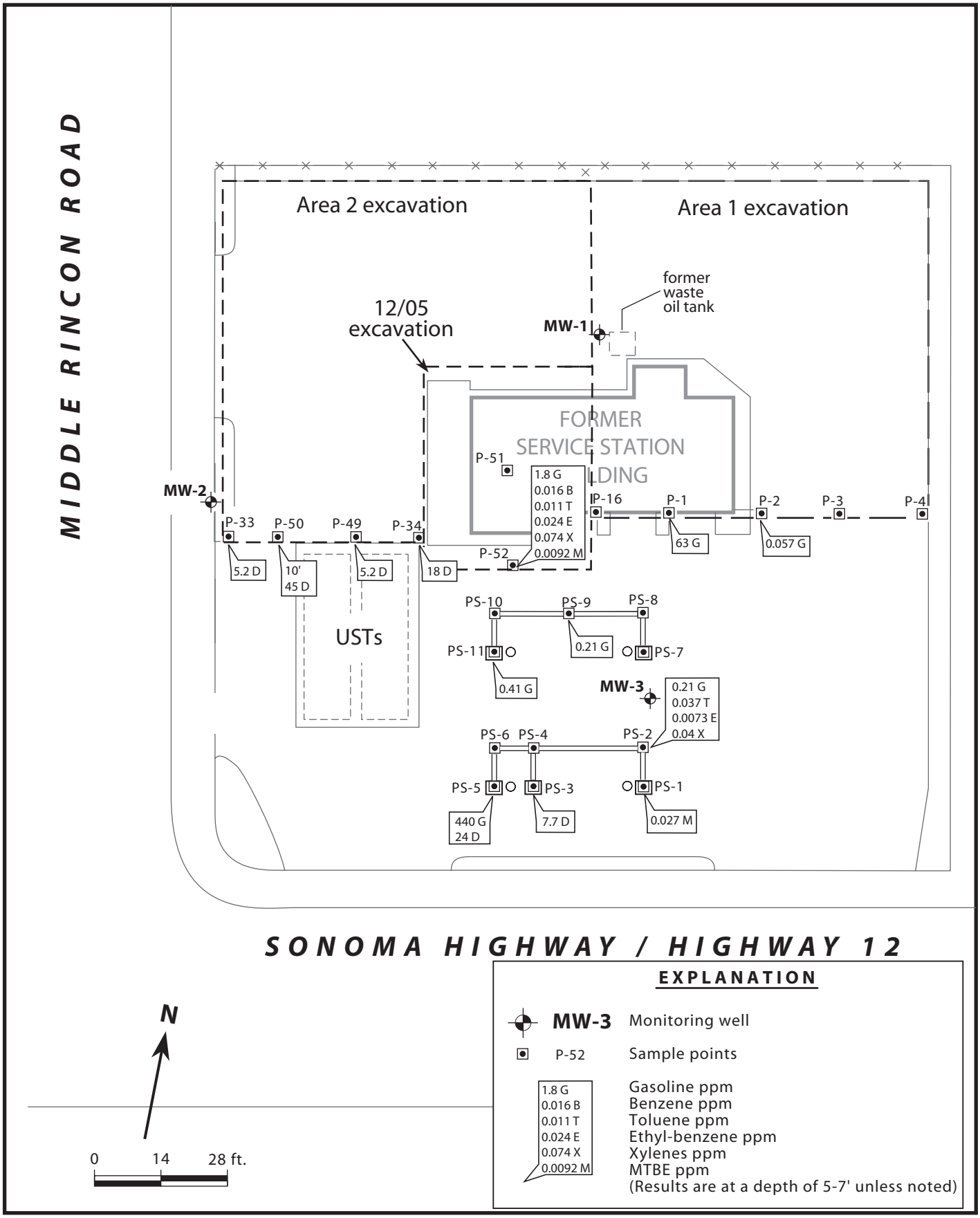

Figure 2. Site Plan and Excavation Limits - Redwood Oil Service Station #101, 4925 Sonoma Highway, Santa Rosa, California

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